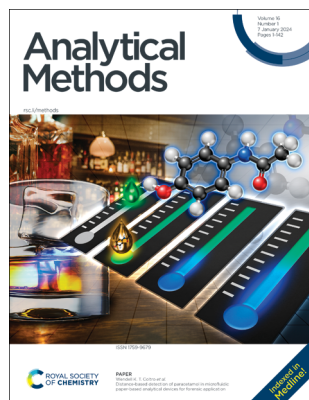


IN THIS ISSUE

ISSN 1759-9679 CODEN AMNECT 16(1) 1–142 (2024)



Cover

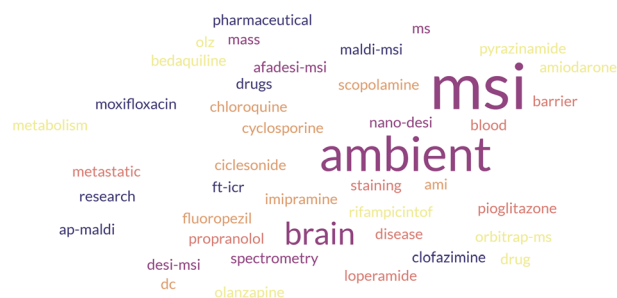
See Wendell K. T. Coltro *et al.*, pp. 33–39. Image reproduced by permission of Wendell K. T. Coltro from *Anal. Methods*, 2024, 16, 33. Image created by Ueta & Cia Ltda via Unsplash.

MINIREVIEW

8

Recent developments and applications of ambient mass spectrometry imaging in pharmaceutical research: an overview

Bharath Sampath Kumar*

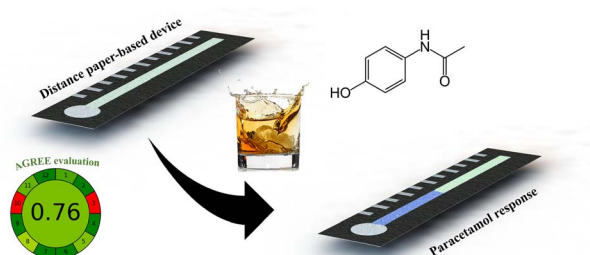


PAPERS

33

Distance-based detection of paracetamol in microfluidic paper-based analytical devices for forensic application

Nikaele S. Moreira, Kemilly M. P. Pinheiro, Lucas R. Sousa, Gabriel D. S. Garcia, Federico Figueredo and Wendell K. T. Coltro*



Advance your career in science

with professional recognition that showcases
your **experience, expertise and dedication**

Stand out from the crowd

Prove your commitment
to attaining excellence in
your field

Gain the recognition you deserve

Achieve a professional
qualification that inspires
confidence and trust

Unlock your career potential

Apply for our professional
registers (RSci, RSciTech)
or chartered status
(CChem, CSci, CEnv)

Apply now

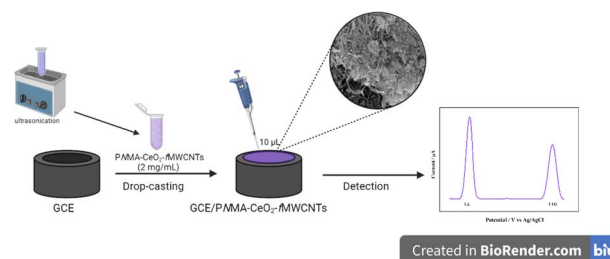
rsc.li/professional-development



40

Development of a facile electrochemical sensor based on GCE modified with one-step prepared PNMA-CeO₂-fMWCNTs composite for simultaneous detection of UA and 5-FU

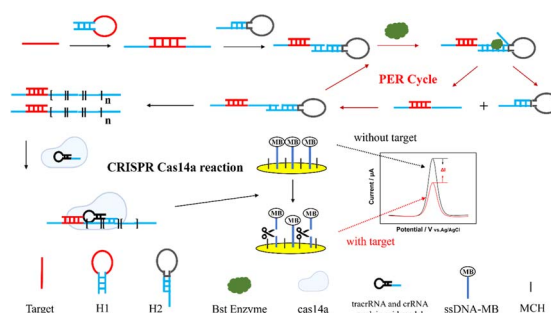
Kübra Turan, Ahmet Üge, Bülent Zeybek and Gözde Aydoğdu Tiğ*



51

PER-CRISPR/Cas14a system-based electrochemical biosensor for the detection of ctDNA EGFR L858R

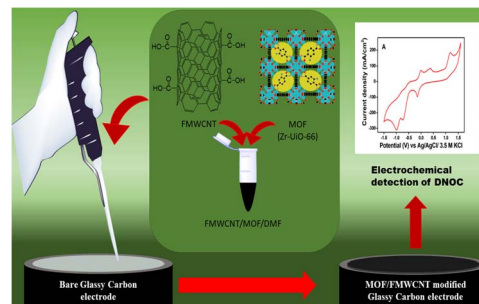
Jing Qi, Qianyi Qi, Zhou Zhou, Yixuan Wu, Aiting Cai, Jinran Wu, Bairong Chen, Qingxiang Wang, Lin Chen* and Feng Wang*



62

Sensitive determination of 4,6-dinitro-*o*-cresol based on a glassy carbon electrode modified with Zr-Uio-66 metal-organic framework entrapped FMWCNTs

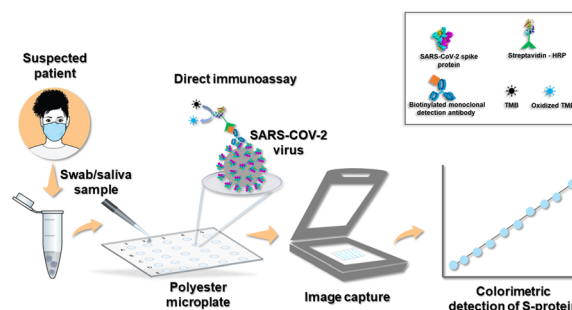
Ranjit Hazarika, Gullit Deffo, Honore Nogholesso Wamba, Nayab Hussain, Shyamali Kalita, Mwina Basumatary, Evangéline Njanja, Soumen Dasgupta and Panchanan Puzari*



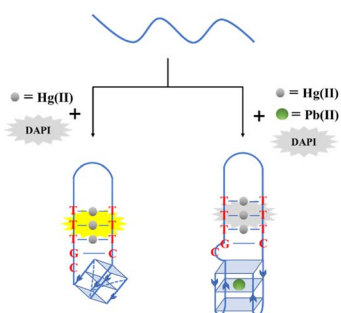
74

Direct immunoassay on a polyester microwell plate for colorimetric detection of the spike protein in swab and saliva samples

Nikaele S. Moreira, Thaisa A. Baldo, Lucas C. Duarte, Leonardo Lopes-Luz, Karoliny A. Oliveira, Paulo F. N. Estrela, Amanda M. Simões, Samira Bühner-Sékula, Gabriela R. M. Duarte and Wendell K. T. Coltro*



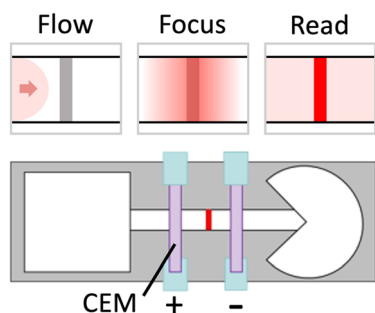
83



Development of a split G-quadruplex and DAPI-based fluorescent probe for Hg(II) and Pb(II) ions detection

Youyang Xu, Yuxin Liu, Xiangxiang Li, Yule Cai, Zihan Gao and Jieqiong Qiu*

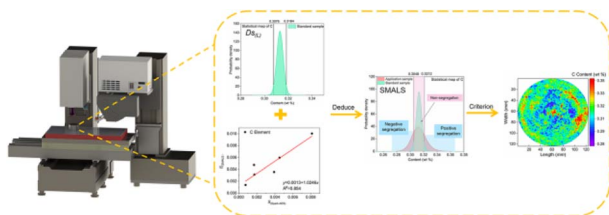
91



Electrokinetic focusing of SARS-CoV-2 spike protein via ion concentration polarization in a paper-based lateral flow assay

Kira L. Rahn, Sommer Y. Osman, Quinlan G. Pollak and Robbyn K. Anand*

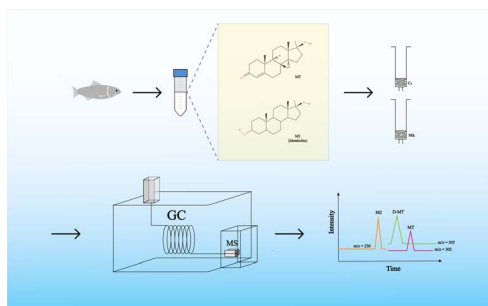
105



Lower limit characterization of segregation degree for large-size low-alloy steel

Xiaofen Zhang, Yunhai Jia,* Zhigang Yang,* Liang Sheng, Baibing Li, Yong Lyu, Shanshan Xu, Chunyan Zhang and Zhihao Tang

114



Simultaneous determination of methyltestosterone and its metabolite in fish by gas chromatography-mass spectrometry

Liufeng Zhang, Juan Sun, Yinmeng Ding, Li Li* and Jing Liu*

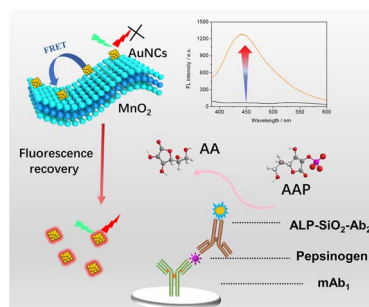


PAPERS

122

Ultrasensitive fluorescence immunoassay of pepsinogen I based on enzyme-triggered decomposition of AuNCs/MnO₂

Huanzong Zhang, Binhuang Cai, Fan Cai,* Mingzhe Lian* and Yinghui Wang



128

Ternary solvent based homogeneous liquid–liquid microextraction for the preconcentration of organochlorine pesticides from water and apple juice samples

Kero Assefa Ago,* Shimeles Addisu Kitte, Gadisa Chirfa and Abera Gure

